

# QUALITATIVE VERSUS QUANTITATIVE MARKETING RESEARCH

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**Abstract.** *Marketing research approach might be accomplished in different ways. In the practical view, we can say that treating it as quantitative and qualitative is more pragmatic and operational.*

**Key words:** qualitative research, quantitative research, qualitative techniques, sample, sampling, weighting factors.

## 1. Qualitative marketing research

Taking into consideration the complexity of qualitative marketing research objectives, its design and implementation impose solving some important points as:

- Choosing the most appropriate instruments of qualitative research, consistent with the objective pursued. In this direction, the specialists put in evidence the main type of interviews that can be used, this problem doesn't represent a dispute point among researchers:
  - Individual in-depth interviews or intensive, that last at the most an hour;
  - Group discussions that last usually 1-2 hours. However, in some situations (e.g. when it is useful to apply "brainstorming" technique) the duration of these group discussions might last at the most seven hours.
  - Semi-structured interviews and shorter interviews (20-30 minutes), being "pulling up" from the customers type of information;
  - Customers' decisions protocols interviews;
  - Repertory grids interviews (named also Kelly Grids);
  - "Mystery Shopping"
- The selection of the customers that take part at qualitative research. This is done, of course, taking into consideration precise criteria, according with research objectives. In this problem, the researchers have two opposite positions, some of them are the adepts of selecting the customers that didn't take part previously (e.g. in the last six months or in the last year) at a qualitative research, especially focus group discussions, and others are prone to do qualitative research with "panels" of customers somehow constant. It is interesting that ones and others have serious arguments for their position, these two basic approaches in customers selection being used in practice, in different ways, according with the objectives pursued.
- Selection and training of researchers for different individual qualitative interviews and of moderators for focus-groups is also a vital aspect of qualitative research of consumer behavior. For this purpose, in practice, are used individuals

with diverse level of knowledge, qualification and experience. Irrespective of the marketing research firms' option, in this problem, the specialists outlined, for a long time, the qualities required for this type of research personnel:

- Capacity of relaxing in interview situations;
- Friendly behavior;
- Capacity of confidence spreading to the people that discuss with;
- To love people and to be interested in their problems;
- To be persons with wide views, "open-minded".

- Results analysis and interpretation, respectively elaboration of oral and written research reports represent a particular aspect of qualitative research of consumer behavior, taking into consideration non-numerical way of expressing it. The specialists consider that it is an art to elaborate qualitative marketing research reports, because at these don't take part only the analysts, but also the interview operators and moderators, according with the situation. Supplementary, the qualitative marketing research reports need to be accompanied with clear conclusions and recommendations that represent the researchers' points of view. Also, almost always, the qualitative studies are verbal presented to the customers by the research teams, these presentations being evaluated by decision making people. The cost of these presentations is relatively high, being included as distinct position in qualitative research budget.

We can conclude that qualitative consumer behavior research is an activity very laborious and relatively different comparing with quantitative research. This is the reason for a double fact: not all the marketing research firms have qualitative marketing research departments, and the second one there are some firms that are exclusively specialized in qualitative research.

Also, it is outstanding that the qualitative research solves the current problems of marketing activity, that can't be solved by quantitative studies. However, as a scientific approach, the qualitative studies have some limits, specialists agreeing that the most important of them is its subjective character, respectively its low possibilities to extend the results at larger collectivities of consumers.

## **2. Quantitative research of consumer behavior**

In a historical perspective, the quantitative research was developed before the qualitative research and still presents an important interest for all decisions makers from market and marketing area. The quantitative research means taking into consideration many theoretic and practical aspects, that can't be exhaustively treated not only in this paper, but also in any attempt to comprise everything in only one paper. For this reason, in the following paragraphs we will outline the most important aspects in quantitative studies design and implementation.

### **2.1. Sample size and structure**

The concerning about samples used in quantitative researches is crucial for their success, so explaining the impressive literature on this topic. We will examine

some of the most important practical aspects on samples and sampling procedure (in this paper we don't treat in detail some statistic-mathematic aspects of sampling, supposing that these are known).

Solving the practical problems related on the samples used in quantitative marketing research requires, in principal, finding adequate solutions for:

- Sample size or dimension for a research;
- Way of designing sample structure, that is how to do the sampling for obtaining representatives results.

To establish the sample size for a research there exists, in the first time, an important statistical-mathematical justification. This is an useful starting point, followed by other evaluations and iterations. Naturally, the sample size, beyond its theoretical basis has to be in accordance with the objectives associated to the study. In practice, an important thing is that although, it is possible to establish a sample size that is representative for the information that will be collected, almost never it doesn't happen like this, because of the research costs. There is accepted a compromise between objectives and costs, being established the sample size that generates the best results, with a reasonable cost. This means to obtain the best report "cost/results". This thing is possible by an adequate maneuver of two elements: amount of information for that the sample is really representative and error rate used to guarantee the results.

These two aspects have to be approached in a tight relation with the quantitative research objectives, that means, in many times, the amount of necessary information and the error rate can be limited at fundamental aspects of the research, without pursuing to know some details that may rather lead at costs increases.

The next two examples, we think, put in evidence this possibility:

a) If, for example, in a quantitative study on auto market, there are required information on automobile endowment rate and on structure of automobiles number that belong to the population, approached or for all the families, or, we may suppose, for selected families among nine income groups. In the first case, the sample size may be around 1000 families, but in the second one it may comprises 3000 families (to assure a statistic stability for the results). The problem is if this additional expense, caused by using a greater sample, is justified by the results. Of course not, because, in this case, the information obtained don't need to be such detailed.

b) Let's continue the previous example, taking into consideration a sample of 1000 families. The calculated error rate is  $\pm 3.2\%$ . If we want to double the accuracy degree, that is to obtain an error rate of  $\pm 1.6\%$ , there is necessary to increase four times the sample size (at 4000 families), therefore we obtain costs by four times higher. This approach isn't justified because the error rate for a sample of 1000 families is enough to guarantee the results of this imaginary study.

As concerns the sampling, the way to select the sample, there are also, theoretical bases as random model, quotas or other combinations of these models. The sampling problem is, however more a practical one. Let's suppose that any sample of 1000 subjects has the same theoretical error rate of  $\pm 3.2\%$ , but this doesn't mean the sample will be representative, irrespective of the way is structured. The selection of the sample components is a true art, it doesn't depend only on the availability of

organized survey bases, but also on the experience of the research team delegated with this task. An adequate stratification of survey base, laborious calculations to assign the sample determined by sampling steps and selection processes of the respondents, are only several elements that assure a representative sampling. Generally, through sampling procedures there is aimed to avoid systematic errors, that, afterwards can't be corrected, but only identified.

## **2.2. The questionnaire**

The questionnaires used in quantitative research of consumer behavior are, as in the case of samples, of the highest importance for obtaining the expected results. For questionnaires elaboration, in quantitative studies, it disposes also by an adequate theoretical background (that is, for example, conversations theory or probabilities calculus theory) and also by an outstanding experience.

A large amount of firms involved in marketing studies and in doing quantitative researches dispose by teams specialized in questionnaires conception, according with requirements and objectives established by research clients.

In essence, the specialists agree with the fact that, to be an efficient instrument, the questionnaire has to accomplish next functions:

- To assure respondents' cooperation and involvement;
- To accurately communicate to respondents what is desired from them;
- To help the respondents to express their responses at questions;
- To avoid the possible responses distortions;
- To facilitate tasks accomplishment by the interview operators;
- To assure the necessary base for processing the collected data;

The practice demonstrated also that a good questionnaire, including its layout (questions page display, response codes, columns numbers etc.), has to facilitate the work for three categories of persons that operate with each questionnaire:

- Interview operators that must have the possibility to record the responses accurately and fast;
- The persons that are involved in checking the questionnaires records, in responses coding and preparation for their automatic procession;
- The persons that introduce the data into computers files ;

Let's note that in questionnaires conception for quantitative studies it has to be careful in avoiding any recording errors. In the opposite case, escaping of these is either very difficult to achieve or, simply, impossible to do. This aspect is related on the language used that must have the same significance for all the interview operators. The problem isn't really so simple as it appears at the first sight, taking into consideration that, in most of quantitative studies, there are used more than a hundred interview operators.

### 2.3. Carrying out the interviews and controlling the field work quality

However laborious and valuable the sample would be designed and questionnaires elaborated, the quantitative study's success can't be obtained without adequate field force. For this reason, in practice it is given a special attention to recruiting, training and quality controlling of all operations done with field force. In the field force category, necessary for gathering the data through questionnaires, are included the next categories of individuals:

- a) Specialists that belong to research firms, having the task to implement the survey and to assure the quality control of the field work;
- b) Interview operators;
- c) Field work supervisors;

As concerns the field force used in quantitative studies, the specialists (from theory and practice) consider that its organizing might be done in two ways:

- Either as field force total independent, without relations with research firms, exclusively specialized in survey implementation or in other quantitative techniques;
- Or field force that belongs to each firm specialized in marketing research and studies;

The first way of organizing the field force is specific to western developed countries. The second one is met in all the countries, there exists independent firms that assure complete research services and have also their own field force.

The interview operators and field supervisors have to be selected and trained with a high degree of exigency, the practice in this area providing real methodologies in this sense. In principle, the interview operators and supervisors have to benefit by:

- a basic training that comprises all the aspects related on field activities required by quantitative studies;
- a specific training, for each research project. An adequate training of interview operators and supervisors is the only one way to assure an uniformity to the field work and to avoid the recording errors.

Finally, all the field work has to be strictly controlled. Quality control is done, in the first time, on interview operators' field work, but also on the supervisors' way to accomplish the assigned tasks. Quality control for the field work is two types:

- Basic control, that is done during interviews development, usually by the local supervisors. In this phase, the control is desirable to comprise almost 50% of the interviews done;
- The second control, done after the field work is finished, usually by the specialists of the research firm. The secondary control is done randomly, and it has to comprise about 15% of the all the interviews. The second quality control is done so that to include all the operators working at the project.

## 2.4. Sample adjustment and representatively

Finally, another very significant problem, that is in researchers' and quantitative research clients' attention is sample adjustment and pondering to assure its representatively. This problem appears to be somehow "occult" to public opinion, though the specialists are familiar with it. The adjustment doesn't mean at all to generate false results (that public opinion is afraid of), but, contrary to assure their truthfulness.

The sample adjustment and weighting is absolute necessary because, only by chance, a sample has a structure according with collectivity structure. The adjustment means to adequately ponder some variables with higher or lower values comparing with those of collectivity, that finally serve as base to extend the study results, basing on calculi.

An illustrative example for sample adjustment, based on a random model is:

- let's suppose that it was designed a sample of 1000 persons, representative for Romanian population, aged of 18 years and over;
- after research implementation, it was found out that the age group between 20-24 years has a ponder of 7.7% in the sample, but its real ponder in the general collectivity is 8.5%, under representation of this age group being caused by an random error;
- consequently, the last age group has to be pondered with an adequate factor, as its weigh in the sample to be equal with that in the general collectivity. This weighting factor is 1.1039. That means each person from this age group will be assigned this over unitary weighting factor;
- automatically, another or other age groups will be overrepresented, these being pondered with a similar factor, but under unitary;

Of course, the sample adjustment operation is done before drawing the tables in which will be written the quantitative study results. Supplementary, to give the possibility for a deep analysis of results, in each table has to be specified both adjusted calculus base, and the initial data of the real sample, both of them in absolute and relative expression.

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